

8. (Amended) A variation detecting apparatus according to Claim 7,

A<sub>2</sub> further comprising:

means for manually setting said switching period with which said transparent state is changed automatically every predetermined time.

13. (Amended) A variation detecting apparatus according to Claim 1,

wherein:

A<sub>3</sub> when there are a plurality of ground objects which can be judged to have variations or ground objects which cannot be judged as to whether there are variations or not, areas including said ground objects are displayed sequentially automatically or manually.

17. (Amended) A variation detecting method for detecting variations

in ground objects in one and the same area between a line drawing map describing profile lines of said ground objects or an image obtained by picking up said ground objects (hereinafter referred to as "reference line drawing/image") from above and an image obtained by picking up said ground objects in the same area from above later on (hereinafter referred to as "target image"), comprising:

A<sub>4</sub> collating said reference line drawing/image with said target image so as to obtain variation indexes indicating whether there are variations or not in said ground objects respectively; and

displaying ground objects which can be judged to have variations or ground objects which cannot be judged as to whether there are variations or not on the basis of said variation indexes, in a display mode in which an area of said

A4 reference line drawing/image including said ground objects and an area of said target image including said ground objects can be compared with each other.

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19. (Amended) A variation detecting method according to Claim 17, wherein:

in said display mode in which an area of said reference line drawing/image including said ground objects and an area of said target image including said ground objects can be compared with each other, said areas are displayed in overlap with each other or placed adjacently to each other.

A5 20. (Amended) A storage medium having a program stored therein for use with a variation detecting method according to any one of Claims 17 through 19, or 28.

21. (Amended) A variation detecting system comprising a variation detecting apparatus and a center apparatus, for detecting variations of ground objects between a reference line drawing/image composed of a line drawing/image map describing profile lines of said ground objects or an image obtained by picking up said ground objects from above and a target image obtained by picking up said ground objects in the same area from above later on, said center apparatus including:

a storage unit for storing said reference line drawing/image and said target image; and

means for providing one or both of said reference line drawing/image and said target image stored in said storage unit to said variation detecting apparatus issuing a request, through a communication line or a medium in response to said request issued by said variation detecting apparatus;

said variation detecting apparatus including:

means for collating said reference line drawing/image with said target image, both said images being supplied from said center apparatus, so as to obtain variation indexes indicating whether there are variations or not in said ground objects respectively; and

As means for displaying ground objects which can be judged to have variations or ground objects which cannot be judged as to whether there are variations or not on the basis of said variation indexes, in a display mode in which an area of said reference line drawing/image including said ground objects and an area of said target image including said ground objects can be compared with each other.

22. (Amended) A variation detecting system comprising a variation detecting apparatus and a center apparatus, for detecting variations of ground objects between a reference line drawing/image composed of a line drawing/image map describing profile lines of said ground objects or an image obtained by picking up said ground objects from above and a target image obtained by picking up said ground objects in the same area from above later on, said center apparatus including:

a first storage unit for storing said reference line drawing/image and said target image;

a second storage unit for storing a processing program for detecting variations of ground objects;

means for providing one or both of said reference line drawing/image and said target image stored in said first storage unit to said variation detecting apparatus issuing a request, through a communication line or a medium in response to said request issued by said variation detecting apparatus; and

means for providing said processing program stored in said second storage unit to said variation detecting apparatus issuing a request, through a communication line or a medium in response to said request issued by said variation detecting apparatus;

said variation detecting apparatus including:

means for collating said reference line drawing/image with said target image on the basis of said reference line drawing/image, said target image and said processing program provided by said center apparatus so as to obtain variation indexes indicating whether there are variations or not in said ground objects respectively; and

means for displaying ground objects which can be judged to have variations or ground objects which cannot be judged as to whether there are variations or not on the basis of said variation indexes, in a display mode in which an area of said reference line drawing/image including said ground objects and an area of said target image including said ground objects can be compared with each other.--